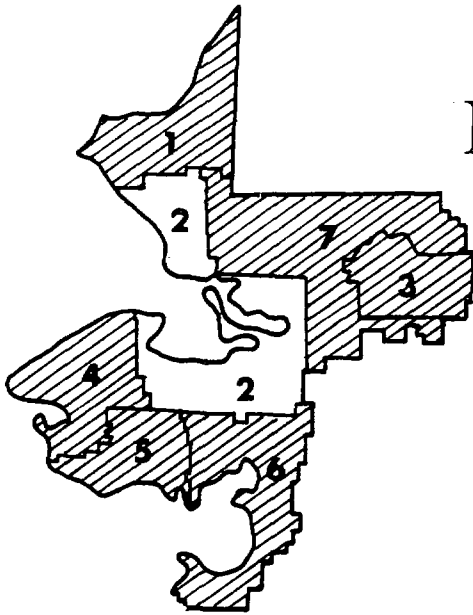


Management Unit 2: KOTZEBUE SOUND



Background

Location and Land Ownership. This unit includes the drainages in the Northwest Arctic Borough that flow into Kotzebue Sound. State land in this region includes uplands in the Kugruk, Kiwalik, and West Fork Buckland River drainages south and east of Deering. The lands along the Wulik and Kivalina drainages, lands around but not including the Red Dog Mine site, and lands along the coast near Cape Seppings are a mixture of state-owned and state-selected lands, and overlapping state and Native selections. Overlapping state and Native selections also cover extensive areas near Deering and Buckland, around Eschscholtz Bay, on the south side of Selawik Lake, near Kivalina, and in the headwaters of the Wulik River. The state also owns all tidelands and submerged lands within three miles of the outer coast, and the shorelands under the more protected waters of Kotzebue Sound, Eschscholtz Bay, Hotham Inlet (Kobuk Lake), and Selawik Lake. The beds of the Kivalina, Wulik, Noatak, Kobuk, Selawik, Buckland, Inmachuk, Kiwalik, Kugruk, and Goodhope Rivers and other navigable waters are in state ownership.

Lands north and west of Selawik are primarily Native owned or Native selected, as are lands

adjacent to Deering and Buckland, and at Cape Espenberg. Several parcels of land within this unit are privately owned, such as Native allotments or patented mining claims. Federal lands include Cape Krusenstern National Monument in the north half of the unit, and large blocks in the Buckland and Goodhope drainages in the south. The unit also includes small corners of the Noatak National Preserve and Kobuk Valley National Park. Selawik National Wildlife Refuge also covers the central portion of the unit around Selawik Lake. The Kotzebue Sound unit falls entirely within the Northwest Arctic Borough, except for two mineralized townships at the north (Red Dog area) and the south (Granite Mountain area).

Resources and Land Uses. The communities of Kivalina, Noatak, Noorvik, Kiana, Selawik, Buckland, Deering, and Kotzebue (the regional hub) are within this unit. Hunting, fishing, egging, whaling, and trapping are some of the major uses of the state uplands and tidelands in this area. The residents also use the land for gathering eggs, berries, plants, and firewood. The lands and waters provide habitat for moose, caribou, waterfowl, and various marine mammals. Reindeer herding activity occurs in the Kiwalik, Kugruk, and Buckland areas. The area is also

used seasonally by guides and their clients, recreational users, and miners. The Noatak River is popular for recreational boating.

There is some bottomland spruce and poplar along the Noatak River. High fish and wildlife values are found along the major river systems and along the coast. Anadromous fish, Arctic char (particularly along the Wulik River), and sheefish are found in the rivers. Some of the rivers and lagoons are important overwintering areas for these fish. In the Wulik area, bowhead and gray whales, spotted, bearded and ringed seals, walrus, polar bears, capelin, and herring are found along the coast. Caribou, brown bear, ducks, geese, and moose are found in the interior. For state land areas in the unit, Dall sheep are found in the DeLong Mountains.

Within this unit there are many large areas with high or very high mineral potential. The most notable mineralized areas are the world-class lead-zinc-silver deposits of the Red Dog Mining District, the coal deposits of the Chicago Creek drainage, and the gold and platinum deposits of the upper Kiwalik and West Fork Buckland Rivers. With the exception of the coastal plain, mining claims are scattered throughout the area, with large claim blocks in the Red Dog District. The Chicago Creek area also has high potential as one of the most likely coal districts to develop in the planning area. A large portion of Kotzebue Sound and other coastal areas of this unit was included in the past state proposal for a Hope Basin oil and gas lease sale. This lease sale is not on the state's current five-year leasing schedule, but could be offered in the future.

Access. Kotzebue is the transportation hub for the area, with barge facilities and a regional airport. Small planes also provide access to outlying community airports, and other remote airstrips. Floatplanes provide access to the coast, the wetland areas west of Kelly River and east of Noatak, and the Red Dog mining district. The gravel road from the Red Dog mine to the Chukchi Sea now provides vehicular access to the interior part of this unit. The Deering-Inmachuk Road provides access into the Inmachuk mining area. The local and regional trail network extends along the major rivers, along the coast, and around the villages. Snowmachines are the main mode of local travel in the winter. There is boating along the coast and on many rivers, such as the Wulik,

Kivalina, Buckland, Inmachuk, Kiwalik, Kugruk, Kobuk, and Noatak.

Management Intent

General. State land in this unit will be kept in public ownership and managed for multiple use. Except for bird rookeries at Ninemile Point and the Choris Peninsula, state land in this unit will remain open to mineral entry. All state land in this unit will be available for leasing for coal or oil and gas. Shorelands in this unit will be managed consistent with the general management intent described on page 3-4.

Subunits. There are six subunits in the Kotzebue Sound management unit: 2a (habitat and harvest tidelands), 2b (general use uplands), 2c (mineral/habitat and harvest lands), 2d (mineral lands), 2e (general use tidelands), and 2f (habitat and harvest uplands). The general management intent for these subunits is described on pages 3-4 to 3-6.

The *Resource Information Summary* chart for this unit highlights important resource values found in each subunit. The summary is based on information from various resource reports prepared for the plan (see appendices C and D).

The *Land Use Designation Summary* chart for this unit provides a quick picture of planned uses for each subunit. For a complete description of management policy, the chart must be used with the statement of management intent and the management guidelines.

Coastal Plans. Nearly all the Kotzebue Sound unit is within the Northwest Arctic Borough Coastal Management Plan (CMP). Activities on state land will be managed consistent with the CMP policies. Important Resource Areas and Sensitive Use Areas recognized by the CMP as requiring special policies for development or for habitat protection are listed below and shown on maps in Appendix J. In addition, the Eschscholtz Bay and City of Kotzebue have been nominated as Areas Meriting Special Attention (AMSAs). When an AMSA plan is adopted for these areas, management will also be consistent with AMSA policies.

Important Resource Areas	Subunit
Cape Espenberg/Goodhope River	2a - habitat and harvest tidelands
Cape Krusenstern	2a - habitat and harvest tidelands
Lower Buckland River	2f - habitat and harvest uplands
Kobuk River Delta	2a - habitat and harvest tidelands
Kobuk/Selawik Lakes	2a - habitat and harvest tidelands,
North Kivalina Coast	2a - habitat and harvest tidelands, and 2f - habitat and harvest uplands
Red Dog Mine Transportation Corridor	2b - general use uplands, and 2f - habitat and harvest uplands
Selawik River Delta	2a - habitat and harvest tidelands
Sisoalik Spit* Subunit	2a - habitat and harvest tidelands
Sensitive Use Areas	Subunit
Elephant Point/Choris Peninsula	2a - habitat and harvest tidelands, and 2f - habitat and harvest uplands
Eschscholtz Bay	2a - habitat and harvest tidelands
Inmachuk River	2b - general use uplands, 2c - mineral/habitat and harvest lands, 2d - minerals lands, and 2f - habitat and harvest uplands
Noatak River Chum Salmon Spawning Area	2f - habitat and harvest uplands
Upper Kivalina River	2f - habitat and harvest uplands
Wulik River Char Overwintering and Spawning Area	2b - general use uplands, and 2f - habitat and harvest uplands

*Sisoalik is the regionally recognized spelling for the area noted as "Sheshalik" on the USGS quadrangle, Kotzebue.

Management Guidelines

Bird Rookeries and Subsurface Resources (Subunits 2a, 2e, and 2f). The Choris Peninsula hosts thousands of glaucous gulls, horned puffins, black-legged kittiwakes, pigeon guillemots, black guillemots, tufted puffins, and pelagic cormorants. Most seabirds arrive at the colonies in late May or early June and remain until the young have fledged, generally by the middle of September, before departing for the winter.

Most state land in these subunits will remain open to new mineral entry. However, state uplands within one-quarter mile of two seabird colonies--Ninemile Point and the Choris Peninsula (Subunit 2f)--will be closed to new mineral entry to protect this important habitat. These colonies are shown on the *Subsurface Designation Summary Map*, page 2-51, and are described in detail in Appendix H, *Mineral Orders for the Northwest Area Plan*. For other guidelines that apply to bird rookeries on state land in these subunits, see Chapter 2, *Fish and Wildlife Habitat Guideline K*, page 2-8.

Commercial Recreation (Subunits 2a, 2b, 2c, 2e, and 2f). *Public and Commercial Recreation Guideline D*, page 2-23, describes state management for commercial recreation. For these subunits, this guideline prohibits commercial recreation leasing in the following areas: 54 anadromous stream mouths or enclosed estuaries, 6 marine mammal haulouts, and 18 seabird rookeries, as shown on the management unit map.

Mouths of Anadromous Streams or Enclosed Estuaries (Subunits 2a and 2e). *Fish and Wildlife Habitat Guideline J*, page 2-8, describes state management for mouths of anadromous streams and narrow openings of enclosed estuaries such as lagoons, inlets, or basins. These areas are shown on the management unit map. For many of these stream mouths and estuaries, the location of the opening is dynamic, and the guideline will apply to their location at the time of a proposed action. Within these subunits, this guideline applies to the following areas:

Anadromous Streams

Buckland River
Ekichuk Lake (one unnamed stream)
Inmachuk River
Jade Creek
Kivalina River (two mouths)
Kivalik River
Kobuk River delta (16 mouths)
Kugruk River
Newheart Creek
Noatak River (three mouths)
Omikviorok River
Rabbit Creek
Selawik River
Four unnamed streams near Attiunik Point
Three unnamed streams north of Mukuksok Point
Two unnamed streams west of Sheshalik Spit
Unnamed creek at Tasaychek Lagoon
Unnamed creek on north shore of Hotham Inlet
Wulik River

Enclosed Estuaries

Imikruk Lagoon
Ipiavik Lagoon
Kivalina Inlet
Kivalik Lagoon
Kotlik Lagoon
Krusenstern Lagoon
Kugruk Lagoon
Selawik Lake
Sheshalik Spit
Singauk Entrance
Tasaychek Lagoon

Selections (Subunit 2f). The state should topfile on two Native selections to provide access and to consolidate ownership if the land is not conveyed to the Native corporations. One parcel is near the coast, south of Kivalina. The other parcel is along the Buckland River, southeast of Buckland.

General. The complete set of areawide guidelines is presented in Chapter 2. The *Resource Information Summary* charts for this unit identify important trails, known or probable heritage sites, and other resource values in specific subunits that are addressed by the appropriate guidelines in Chapter 2. Any Chapter 2 guidelines could apply to certain uses within this management unit. Those most likely to apply are

- Coordination and public notice
- Fish and wildlife habitat
- Grazing
- Heritage resources
- Public and commercial recreation
- Subsistence activities and traditional uses
- Subsurface resources
- Trail Management

RESOURCE INFORMATION SUMMARY

Management Unit 2: Kotzebue Sound - Page 1 of 3

RESOURCE		SUBUNIT
	2a	2b
Fire Protection	N/A	Mostly modified; limited north of Goodhope R. and west of Noatak R.; full along Noatak R. and Baldwin Peninsula.
Fish and Wildlife	A1: 18 seabird rookeries, including two at Chamisso Island and four at Choris Peninsula; 37 anadromous stream mouths (16 at Kobuk River Delta plus 21 others in the subunit). A2/B1: belukha, bowhead, walrus, bearded seal, spotted seal, herring and capelin, ducks and geese (spring, nesting, fall); ringed seal (breeding and pupping Kiwalik Lagoon); moose, brown bear, caribou (Kugruk River and east), polar bear.	B2: moose, caribou (east of Kugruk-Koyuk River valleys); brown bear; overwintering Arctic char.
Forestry	Driftwood	Low to none except spruce and/or hardwoods along upper reaches of Kugruk, Koyuk, and Kiwalik Rivers.
Heritage Resources	Known cultural values along coast, especially at Cape Espenberg, Kotzebue, Deering, Selawik Lake; very high potential for sites all along coast.	Some known cultural sites on upper Wulik River; very high potential along Kobuk and Selawik Lake shores.
Important Trails	Boat and winter trail along coast; coastal trail along southwest shore of Kobuk Lake; Kotzebue - Noorvik (and points east); Kotzebue - Noatak (and points north); E-W across Selawik Lake; trails up the Squirrel River and Kobuk River; Buckland to Kotzebue Trail; Deering to Kotzebue Trail.	Red Dog Mine road; Kotzebue to Buckland/Deering inland trail and Kobuk Lake trail; Noorvik to Kiwalik; Elephant Point winter trail; Baldwin Peninsula (Callahan's cabin) over Eschscholtz Bay to Choris Peninsula; Callahan's cabin to west coast of Baldwin Peninsula; trails connecting Deering, Buckland, Candle, Granite Mtn., White Mtn., Koyuk.
Minerals	Low to very low	Mostly low and moderate, some high potential; some very high potential near Hunter Creek. Numerous mining claims in Kugruk, Koyuk, Kiwalik, and West Fork Buckland drainages, and within the Red Dog Extension area.
Oil & Gas	Low potential; part of past proposed Hope Basin lease sale.	Low potential; part of past proposed Hope Basin lease sale.
Public Access	Boat routes or winter trails, local and regional trails; Sadie Creek Road along coast into Kotzebue; remote airstrips and floatplane landing areas along Kobuk River and Selawik Lake shoreline; wheelplane landings along coast; community airstrips at Kivalina.	Boat routes or winter trails, local and regional trails; Red Dog mine road; remote airstrip on south side of Baldwin Peninsula.
Recreation	Existing at Kobuk River Delta and upriver; at Choris Peninsula and Attiunuk Pt., along Noatak River and coastline west of Sheshalik; scenic views, beachcombing, picnicking, camping, boating, berry picking on Goodhope River.	Unknown
Reindeer Grazing	N/A	Large areas of winter range south of Buckland-Deering.
Settlement Suitability	N/A	Moderate suitability along trails and coastline of Kobuk Lake; some low potential along major rivers and along trails east and south of Candle and north and west of Chicago Creek; remainder unsuitable.
Subsistence	Subsistence use in this unit has been documented by studies of the DF&G, Subsistence Division, for the communities of Ambler, Buckland, Deering, Kiana, Kobuk, Kivalina, Noatak, Noorvik, Selawik, and Shungnak. Subsistence use by other communities—such as Kotzebue—is known to exist, but the extent of their use has not been documented in studies for the NWAP.	

See Appendix C for a list of reports with more detailed information, and Appendix D for definition of ratings.

RESOURCE INFORMATION SUMMARY

Management Unit 2: Kotzebue Sound - Page 2 of 3

RESOURCE	SUBUNIT	
	2c	2d
Fire Protection	Red Dog district limited; remainder modified.	Modified
Fish and Wildlife	A1: one anadromous stream mouth (Kiwalik R.); A2/B1: caribou migration and winter range; ducks, geese (spring, nesting, fall); moose, brown bear, anadromous fish.	B2: moose, brown bear, caribou (east of Kugruk-Koyuk River valleys).
Forestry	Low to none except spruce or hardwoods along Quartz Creek.	None to low.
Heritage Resources	Known cultural sites along upper Wulik and Kivalina Rivers and their tributaries; historic mining activity at Chicago Creek.	Unknown
Important Trails	Upper Wulik River; along Candle to Kougarak; along Deering-Kougarak; Candle to Kotzebue; Candle to Deering; Candle to Buckland; Candle to Koyuk; Deering-White Mountain trail; Granite Mountain-Deering (two routes).	Trails from Granite Mountain area to Deering, Buckland, Koyuk; Granite Mountain trail between two airstrips; road near Candle; Candle to Kougarak trail.
Minerals	Very high to high potential; zinc-lead-silver within Red Dog District; gold along Kiwalik and Kugruk Rivers and near Granite Mtn; known coal deposits at Chicago Creek; numerous mining claims.	Very high potential; gold on Inmachuk and Kugruk Rivers; placer and platinum near Granite Mountain; many mining claims.
Oil & Gas	Unknown	Unknown
Public Access	Remote landing sites at Red Dog and Lik, Candle, Kugruk R., Bear Creek, Bob Creek and Hannum Creek; floatplanes on lakes and rivers; wheelplanes on beaches; boats along coast; intervillage, regional and local trails.	Unimproved road near Candle; Inmachuk mining area connecting trails; Quartz Creek and Granite Mountain airstrips and two other remote strips; local and regional trails.
Recreation	Existing along Quartz Creek (camping), potential along lower Kiwalik River.	Potential near Granite Mountain hot springs.
Reindeer Grazing	Some areas north of Granite Mountain with winter range.	Large areas north of Granite Mountain with winter range.
Settlement Suitability	Mostly low to unsuitable; some moderate potential along upper Wulik River and adjacent to landing areas.	Mostly unsuitable, some low potential.
Subsistence	Subsistence use in this unit has been documented by studies of the DF&G, Subsistence Division, for the communities of Ambler, Buckland, Deering, Kiana, Kobuk, Kivalina, Noatak, Noorvik, Selawik, and Shungnak. Subsistence use by other communities—such as Kotzebue—is known to exist, but the extent of their use has not been documented in studies for the NWAP.	

See Appendix C for a list of reports with more detailed information, and Appendix D for definition of ratings.

RESOURCE INFORMATION SUMMARY

Management Unit 2: Kotzebue Sound - Page 3 of 3

RESOURCE		SUBUNIT
2e		2f
Fire Protection	N/A	Modified
Fish and Wildlife	A1: two anadromous stream mouths; A2: belukha, herring and capelin, ducks and geese (spring, nesting, fall); moose, brown bear, caribou (Kugruk River and east).	A1: seabird colonies at Ninemile Pt. and Choris Peninsula; A2/B1: belukha, anadromous fish; moose winter range; ducks and geese, Dall sheep; overwintering Arctic char; caribou (some winter range in east portions), brown bear. Areas upgraded due to human use; Buckland and Inmachuk River drainages.
Forestry	Driftwood	Low to none except some along upper Buckland River.
Heritage Resources	High probability of cultural sites along coast.	Known cultural sites along Wulik River and its tributaries and Kivalina River, high probability of cultural sites along coast and lakeshores.
Important Trails	Boat and winter trails along coast; coastal winter trail, Kotzebue to Sheshalik and north; local trails to Kobuk Lake; Deering to Kotzebue trail.	Kotzebue to Buckland-Deering inland trail; coastal trail 5 miles north and south of Cape Blossom; trails north of Buckland; Candle connecting trails; Buckland River, Kiwalik River, Deering-White Mountain trails; Red Dog Mine road; Kivalina River trail; Noatak to Kivalina trail; Wulik River trail; Asikpak River trail; boat and winter trails along coast; Noatak River trail.
Minerals	Low or unknown.	Known coal potential on upper Kiwalik at Wilson Creek; moderate to high, some low, some very high in Red Dog extension areas; numerous mining claims.
Oil & Gas	Low potential; part of past proposed Hope Basin lease sale.	Low potential; part of subunit in past proposed Hope Basin lease sale. Boat routes or winter trails, local and regional; Sadie Creek Road along coast into Kotzebue; floatplane or wheelplane along coast in many places.
Public Access	Boat routes or winter trails, local and regional; Sadie Creek Road along coast into Kotzebue; floatplane or wheelplane along coast in many places.	Boat routes or winter trails, local and regional; Sadie Creek Road along coast into Kotzebue; remote airstrips at Arctic, south of Cape Blossom, Kiwalik R., and south of Hunter Lake; several wheelplane landing sites along Wulik and Kivalina Rivers, and Wrench Creek; Red Dog Mine Road; Deering-Inmachuk Road.
Recreation	Unknown	High value along Wulik R. and Noatak R.; existing along Kivalina and West Fork Buckland rivers, and Hunter Lake (camping); potential along Buckland River.
Reindeer Grazing	N/A	Large areas of winter range along Kiwalik and Buckland River drainages.
Settlement Suitability	N/A	Some moderate along major rivers, Kobuk lakeshore and Chicago Creek; remainder mostly low; some unsuitable potential.
Subsistence	Subsistence use in this unit has been documented by studies of the DF&G, Subsistence Division, for the communities of Ambler, Buckland, Deering, Kiana, Kobuk, Kivalina, Noatak, Noorvik, Selawik, and Shungnak. Subsistence use by other communities--such as Kotzebue--is known to exist, but the extent of their use has not been documented in studies for the NWAP.	

See Appendix C for a list of reports with more detailed information, and Appendix D for definition of ratings.

LAND-USE DESIGNATION SUMMARY

MANAGEMENT UNIT 2 - KOTZEBUE

SUBUNIT	LAND USE DESIGNATIONS			COMMENTS
	PRIMARY SURFACE USE ¹	PROHIBITED SURFACE USE ²	SUBSURFACE ³	
2a	Habitat & harvest tidelands	Remote cabins Commercial rec. leases in some areas	Open	
2b	General use uplands	Land disposals Remote cabins Commercial rec. leases in some areas	Open	
2c	Minerals/ Habitat & harvest lands	Land disposals Remote cabins Commercial rec. leases in some areas	Open	Chicago Creek (along the Kugruk River) is also designated coal.
2d	Mineral lands	Land disposals Remote cabins	Open	
2e	General use tidelands	Remote cabins Commercial rec. leases in some areas	Open	
2f	Habitat & harvest uplands	Land disposals Remote cabins Commercial rec. leases in some areas	Open, except within 1/4 mile of 2 seabird rookeries	2 small parcels proposed for state selection

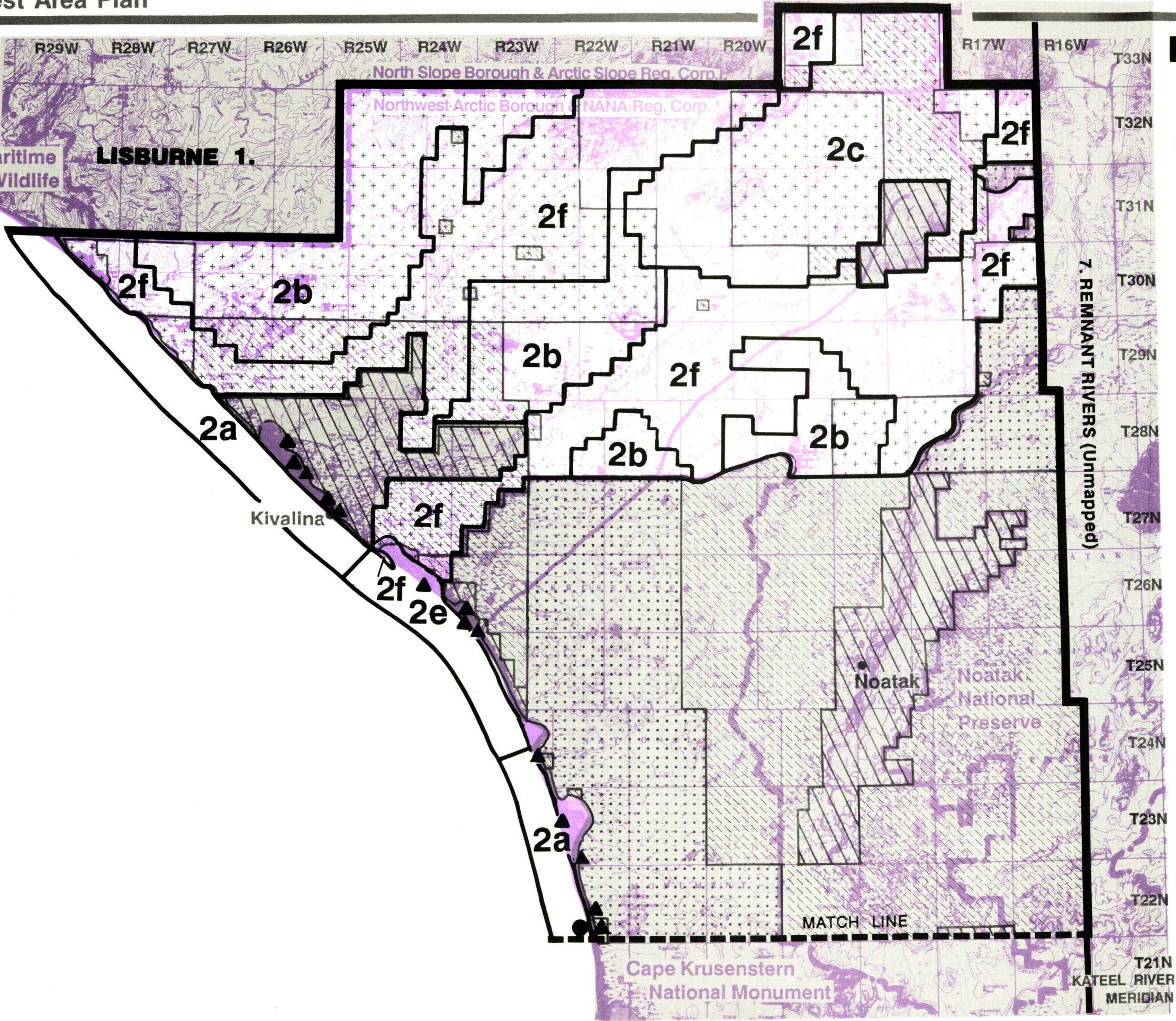
¹Secondary uses include: grazing--on the Seward Peninsula, west of the West Fork Buckland River--in subunits 2b, 2c, 2d, and 2f; recreation in subunits 2a, 2c, and 2f; and forestry in subunits 2b, 2c, and 2f. For more details, see Resource Information Summary for this unit, and Appendix D.

²Other uses such as material sales, land leases, or permits that are not specifically prohibited may be allowed. Such uses will be allowed if consistent with the management intent statement, the management guidelines of this unit, and the relevant management guidelines listed in Chapter 2.

³All areas are available for leasing for leasable minerals. Statements of whether or not the unit is open to mineral entry refer only to locatable minerals. See glossary in Appendix A for definitions of leasable and locatable minerals. See Appendix H for detailed descriptions of areas closed to mineral entry.

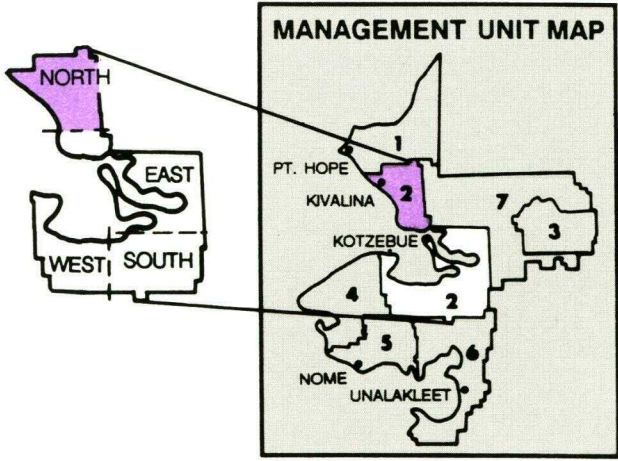
KOTZEBUE SOUND

Alaska Maritime
National Wildlife
Refuge



LEGEND

- Management Unit Boundary
- 2a Subunit Boundary
- No Pattern State Owned
- + + State Selected
- Proposed State Selection
- Native Owned
- Native Selected
- Native/State Selected
- Federal
- X Marine Mammal Haulouts
- Bird Rookeries
- ▲ Anadromous Stream Mouths or Enclosed Estuaries



Map Scale:
1:500,000

U.S.G.S. Quads:
Delong Mts.
Noatak

KOTZEBUE SOUND

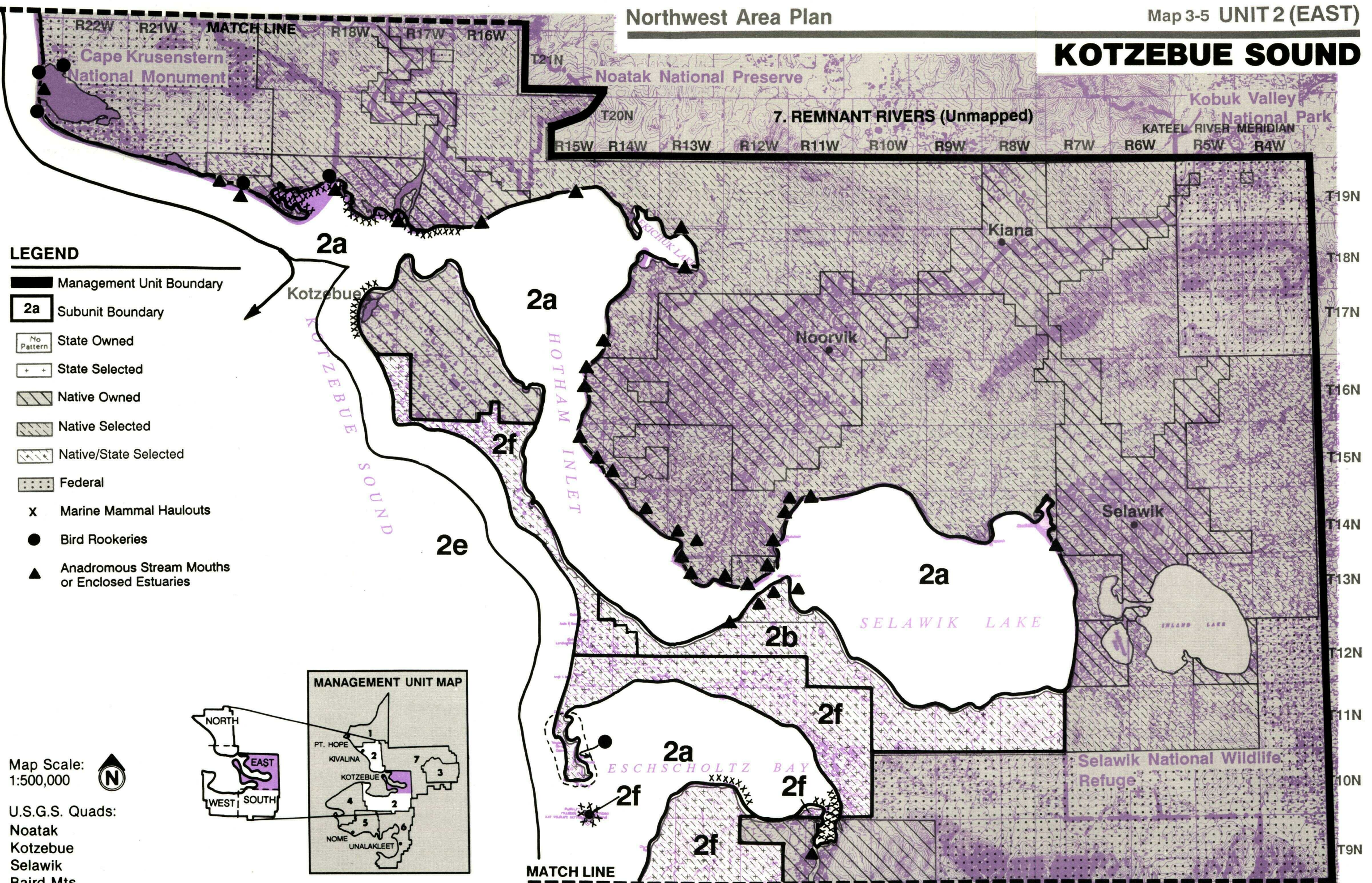
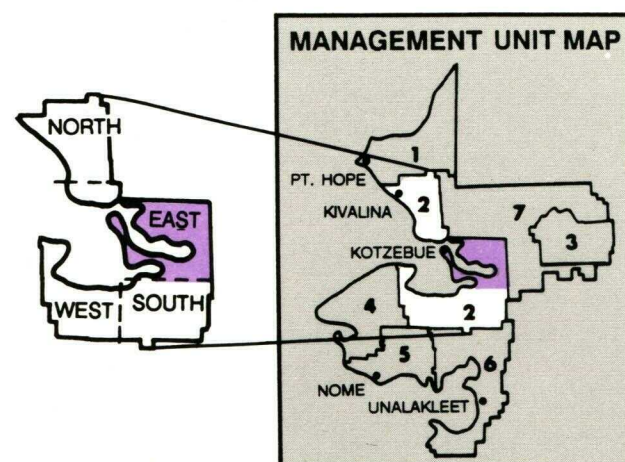
LEGEND

- Management Unit Boundary
- 2a Subunit Boundary
- State Owned
- State Selected
- Native Owned
- Native Selected
- Native/State Selected
- Federal
- x Marine Mammal Haulouts
- Bird Rookeries
- ▲ Anadromous Stream Mouths or Enclosed Estuaries

Map Scale:
1:500,000

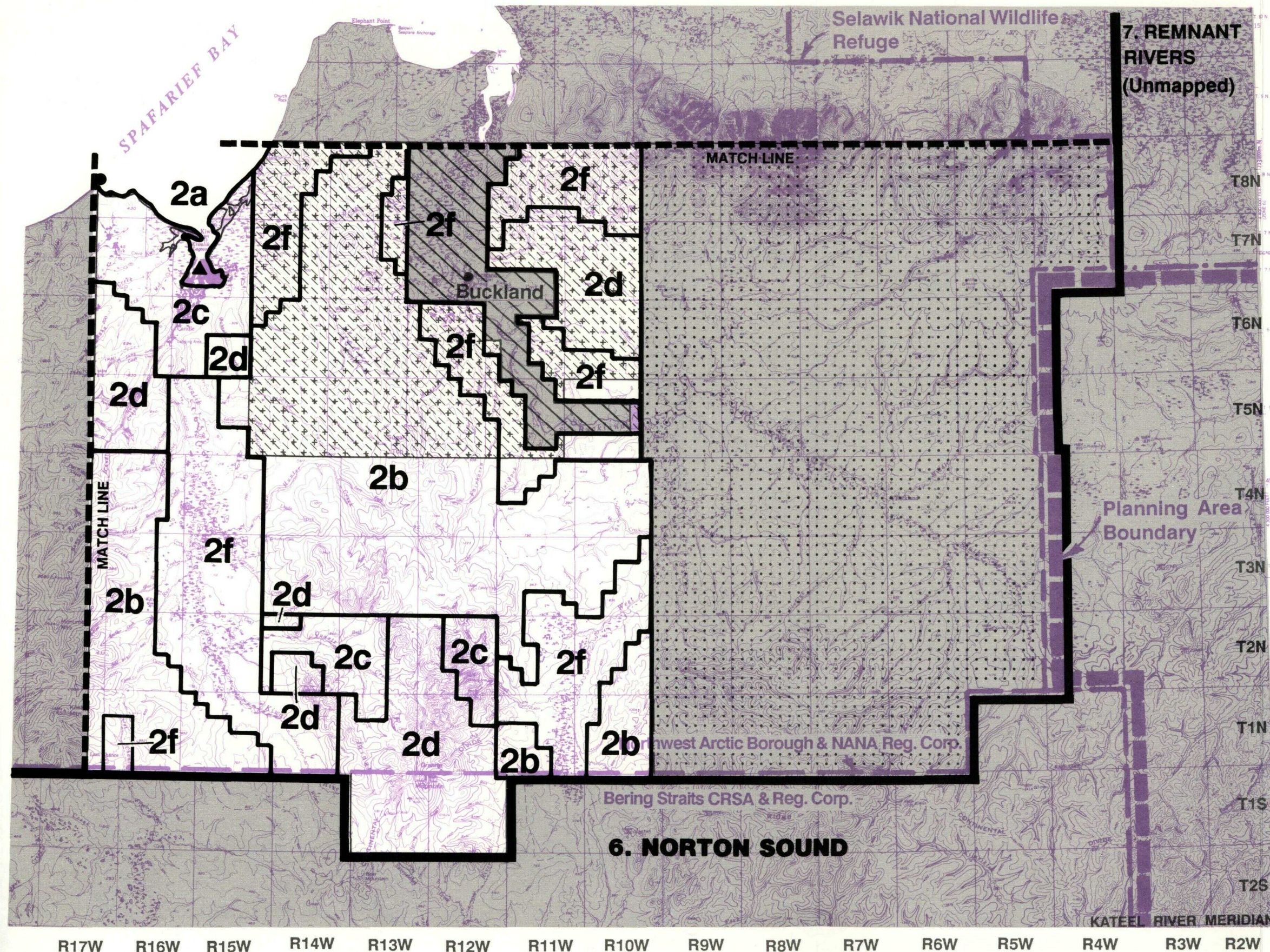


U.S.G.S. Quads:
Noatak
Kotzebue
Selawik
Baird Mts.



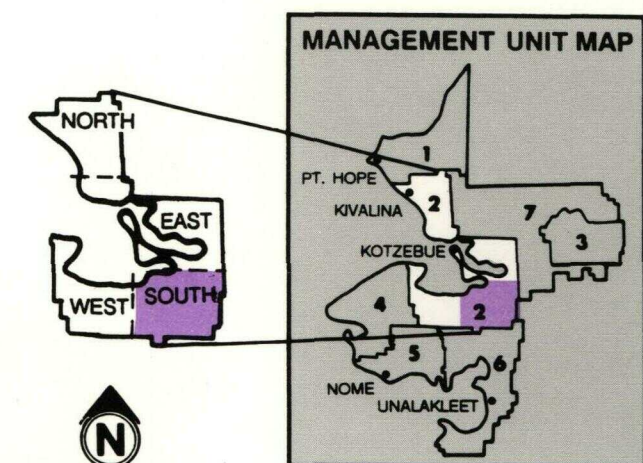
Northwest Area Plan

KOTZEBUE SOUND



LEGEND

- Management Unit Boundary
- 2a Subunit Boundary
- State Owned
- State Selected
- Native Owned
- Native Selected
- Native/State Selected
- Proposed State Selections
- Federal
- Marine Mammal Haulouts
- Bird Rookeries
- Anadromous Stream Mouths or Enclosed Estuaries



Map Scale:
1:500,000

U.S.G.S. Quads:
Selawik
Candle

KOTZEBUE SOUND

Northwest Area Plan

LEGEND

- Management Unit Boundary
- Subunit Boundary
- State Owned
- State Selected
- Native Owned
- Native Selected
- Native/State Selected
- Federal
- Marine Mammal Haulouts
- Bird Rookeries
- Anadromous Stream Mouths or Enclosed Estuaries

Map Scale: 1:500,000

U.S.G.S. Quads: Kotzebue Bendeleben

